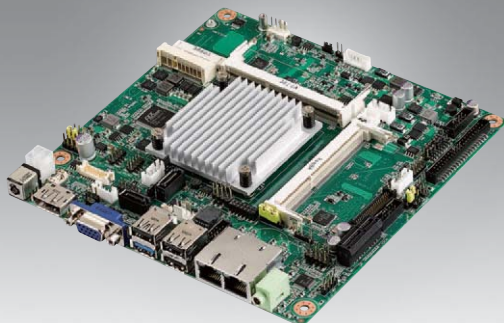


AIMB-215

Intel® Celeron® Quad Core J1900/N2930/N2807
Mini-ITX with CRT/LVDS/DP++, 6 COM,
and Dual LAN

NEW



susiAccess



CE FCC

Features

- Supports Intel Celeron Quad Core J1900/N2930/N2807 processor
- Two 204-pin SO-DIMM up to 8 GB DDR3L 1333 MHz SDRAM
- Supports VGA/DP1.2 /24-bit dual channel LVDS
- Supports 1 PCIE x1 and 2 mini-PCIE expansion slot, 6 COMs, 9 USB 2.0, and 1 USB 3.0
- Lower total cost of ownership with DC12V support and onboard TPM1.2(optional)
- Supports SUSIAccess and Embedded Software APIs

Software APIs:



H/W Monitor Brightness



GPIO

Utilities:



BIOS flash



Monitoring

Specifications

Processor System	CPU (32nm)	Intel J1900	Intel N2930	Intel N2807
	Max. Speed	2.0 GHz (Quad core)	1.83 GHz (Quad core)	1.58 GHz (Dual core)
Expansion Slot	L2 Cache	2 MB	2 MB	1 MB
	BIOS	AMI 16 Mbit SPI	AMI 16 Mbit SPI	AMI 16 Mbit SPI
Memory	PCI	-		
	Mini-PCIE	2 (F/S x 1 support mSATA, H/S x 1 with SIM card holder)		
Graphics	PCIe	PCI Express x1 (Gen2)		
	Technology	Dual channel DDR3L 1066/1333 MHz SDRAM		
Memory	Max. Capacity	8 GB/4 GB per SO-DIMM		
	Socket	2 x 204-pin SO-DIMM (Non-ECC)		
Graphics	Controller	Intel Gen 7 Graphics Engines and media encode/decode engine; GPU Frequency: 688 MHz for J1900; 313 MHz for N2930		
	VRAM	Shared system memory up to 224 MB SDRAM		
Ethernet	VGA	Supports up to 2560 x 1600		
	LVDS	Supports dual channel 48-bit up to 1920 x 1200		
Ethernet	Display Port 1.2	1, Supports DP++, resolution up to 2560 x 1600 colay eDP port (optional)		
	Dual Display	VGA+DP1.2, VGA+LVDS, LVDS+DP1.2, VGA+eDP (optional), LVDS+eDP (optional), Supports extended mode and clone mode		
Ethernet	Interface	10/100/1000 Mbps		
	Controller	GbE LAN1: Realtek 8111E		
Ethernet	Connector	GbE LAN2: Realtek 8111E		
	Channel	RJ-45 x 2		
SATA	Max Data Transfer Rate	300 MB/s		
	Channel	2, SATA 2 colay mSATA (optional); SATA 1 support SATA-DOM device		
Rear I/O	CRT	1		
	DP1.2	1		
Rear I/O	Ethernet	2		
	USB	4 (3 x USB 2.0/1 x USB 3.0)		
Rear I/O	Audio	1 (Mic-in or Line out)		
	DC jack	1 (2.5 mm)		
Internal Connector	LVDS & Inverter	1/1		
	eDP	1 (optional)		
Internal Connector	USB	6 (USB 2.0 compliant)		
	Serial	6 (5 x RS-232, 1 x RS-232/422/485; COM 3 support RS-232/422/485 auto flow control; COM 6 support 5V/12V by jumper selection)		
Internal Connector	IDE	None		
	SATA	2		
Internal Connector	SATA PWR Connector	2		
	Parallel	None		
Internal Connector	GPIO	8-bit		
	PS/2 KB & MS	1		
Watchdog Timer	Output	System reset		
	Interval	Programmable 1 ~ 255 sec/min		
Power	Power Type	Single voltage 12V DC input; 1 x External DC jack; 1 x Internal 4-pin (2x2) power connector; Supports AT/ATX mode		
	Typical Power Consumption	Win Idle 10.17 W (Intel Celeron J1900 2.0 GHz / DDR3L 1600 MHz 4GB x 2)		
Environment	Operating		Non-Operating	
	Temperature	0 ~ 60° C (32 ~ 140° F)	-40 ~ 85° C (-40 ~ 185° F)	
Physical Characteristics	Dimensions	170 mm x 170 mm (6.69" x 6.69")		

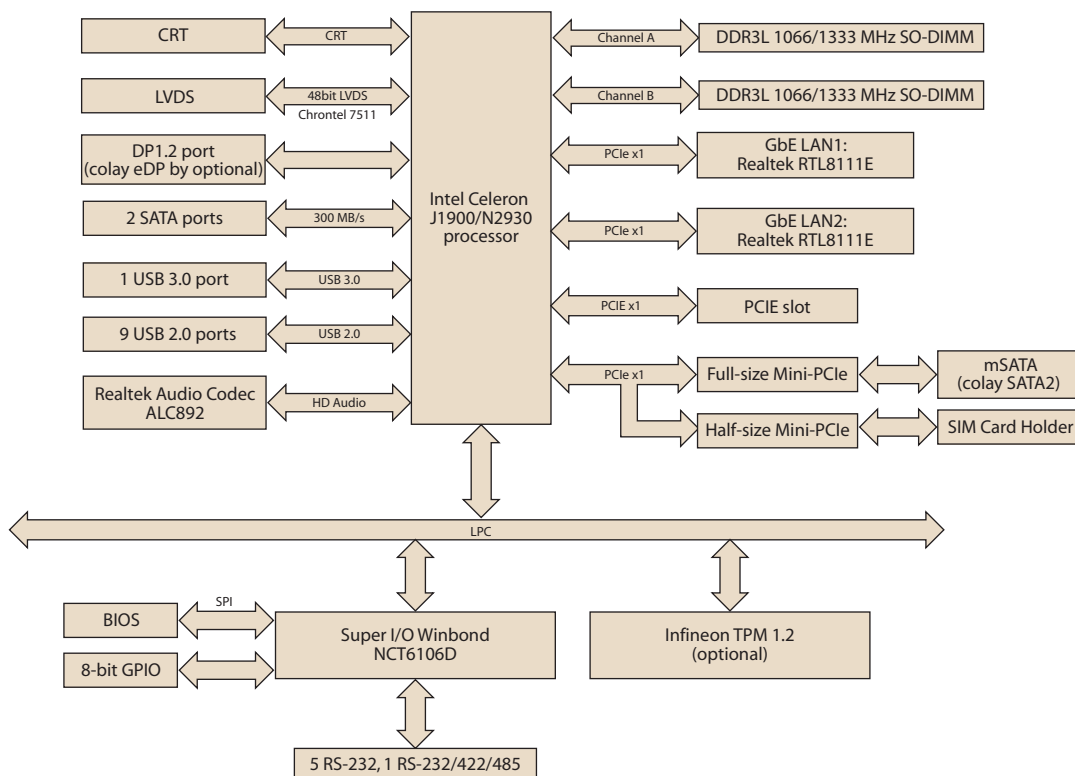
ADVANTECH

Industrial Motherboards & Systems

All product specifications are subject to change without notice

Last updated : 1-Aug-2014

Block Diagram



Ordering Information

Part Number	CPU	Memory	DP++/eDP	CRT	LVDS	GbE LAN	COM	SATA II	USB3.0/2.0	MiniPCle	TPM	AMP	PCle x1	Thermal Solution
AIMB-215D-S6A1E	J1900	2	1 (1)	1	1	2	6	2	1/9	2 (1 x F/S; 1 x H/S)	(1)	(2 x 6W)	1	Passive
AIMB-215N-S6A1E	N2930	2	1 (1)	1	1	2	6	2	1/9	2 (1 x F/S; 1 x H/S)	(1)	(2 x 6W)	1	Passive
AIMB-215U-S6A1E	N2807	1	1 (1)	1	0	1	2	1	1/3	1 x F/S (PCle/SATA signal only)	(1)	(2 x 6W)	1	Passive
AIMB-215L-S6A1E	J1900	2	1 (1)	1	0	1	2	1	1/3	1 x F/S (PCle/SATA signal only)	(1)	(2 x 6W)	1	Passive

Note: Passive = fanless

* () BOM options available on MP version

Packing List

Part Number	Description	Quantity
1700003194	SATA HDD cable	1
1700018785	SATA power cable	1
1700008876	1-to-4 serial ports cable kit, 35 cm	1
1700100250	1-to-1 serial port cable, 25 cm	2
1920000569T000	I/O port bracket	1
2006021500	Startup manual	1
2066021500	Driver CD	1
1960064228N001	Fanless heatsink	1

Optional Accessories

Part Number	Description
1757003995	Adapter AC100-240V 60W +12V/5A
1757003064	Adaptor AC100-240V 84W, 12V/7A
1703060191	KBMS cable 1*6P-2.5/DIN-6P(F)*2, 25 cm

Optional Chassis

Part Number	Description
AIMB-B2000-00YE	Mini-ITX chassis with optional DC Adaptor

Embedded OS/API

OS/API	Part No.	Description
WES8	TBD	Windows Embedded 8
WES7	TBD	Windows Embedded 7

I/O View

